

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**LISTING OF CLAIMS:**

1. (Previously Presented) A system for automatically creating, installing, verifying and configuring functionalities, stored in installation, verification and/or configuration files as software packages, for system components, arranged in a distributed automation system, using a knowledge-based system planning tool, the system comprises a user interface, a planning logic unit, a data management unit, a planning database an installation tool and a processor, where
  - selected system options in the user interface are received by the processor and selected for the planning logic unit and the data management unit,
  - the planning database stores system information for the data management unit,
  - the planning logic unit produces plans for the system structure from the system options in the user interface and supplies them to the data management unit,
  - the data management unit generates and configures software packages from the system options in the user interface, from the system information in the planning database
  - from the plans for the system structure which are produced in the planning logic unit, and
  - transfers the software packages to the installation tool
  - the data management unit interacts with a change unit in order to update the planning data stored in the planning database and/or the plans produced by the planning logic unit and

- the installation tool automatically checks the software packages taking account of rules, stipulations and dependencies among the system components.
2. (Cancelled).
  3. (Cancelled).
  4. (Previously Presented) The system as claimed in claim 1, wherein the system options selected in the user interface comprise information about the system structure and the system types.
  5. (Previously Presented) The system as claimed in claim 1, wherein the software packages are system component data and setup data for the system components.
  6. (Previously Presented) The system as claimed in claim 1, wherein a data generator is provided in the data management unit for producing the software packages.
  7. (Cancelled).
  8. (Previously Presented) The system as claimed in claim 1, wherein the installation tool provides the software packages for transmission, installation and configuration for the respective system components.
  9. (Previously Presented) A method for automatically creating, verifying, installing and configuring functionalities, stored in installation, verification and/or configuration files as software packages, for system components, arranged in a distributed automation system, using a knowledge-based system planning tool which comprises a user interface, a planning logic unit, a data management unit, a planning database and an installation tool, where

- system options selected using the user interface are provided for the planning logic unit and the data management unit,
- the data management unit uses an integrated data and rule manager to provide conditioned planning data,
- the planning database is used to store system information for the data management unit,
- which the planning logic unit uses to produce plans for the system structure from the system options in the user interface and from planning data from the data management unit of the and are supplied to the data management unit,
- the data management unit is used to generate and configure software packages from the system options in the user interface, from the system information in the planning database
- from the plans for creating the system structure which are produced in the planning logic unit to transfer them to the installation tool
- a change unit is used to update the planning data stored in the planning database and/or the plans produced by the planning logic unit and
- the installation tool automatically checks the software packages taking account of rules, stipulations and dependencies among the system components.

10. (Cancelled).

11. (Cancelled)

12. (Previously Presented) The method as claimed in claim 9, wherein the user interface is used to store information about the system structure and the system types.

13. (Previously Presented) The method as claimed in claim 9, wherein the software packages are used to store system component data and setup data for the system components.

14. (Previously Presented) The method as claimed in claim 9, wherein the software packages are generated using a data generator.

15. (Cancelled)

16. (Previously Presented) The method as claimed in claim 9, wherein the generated software packages are provided for transmission, installation and configuration for the respective system components, and are automatically installed, checked and configured in a prescribed order and manner.

17. (Previously Presented) The system as claimed in claim 1, wherein the data management unit interacts with a change unit in order to update the planning data stored in the planning database and/or the plans produced by the planning logic unit.

18. (Previously Presented) The system as claimed in claim 17, wherein the system options selected in the user interface comprise information about the system structure and the system types.

19. (Previously Presented) The method as claimed in claim 9, wherein a change unit is used to update the planning data stored in the planning database and/or the plans produced by the planning logic unit.

20. (Previously Presented) The method as claimed in claim 19, wherein the user interface is used to store information about the system structure and the system types.

21. (Currently Amended) A non-transitory ~~tangible~~ computer readable medium, having instructions stored thereon for automatically creating, installing, verifying and configuring functionalities, stored in installation, verification and/or configuration files, for system components, arranged in a distributed automation system, using a knowledge-based system planning tool, the system comprises a user interface, a planning logic unit, a data management unit, a planning database an installation tool and a processor, where

selected system options in the user interface are received by the processor and selected for the planning logic unit and the data management unit,

the planning database stores system information for the data management unit,

the planning logic unit produces plans for the system structure from the system options in the user interface and supplies them to the data management unit,

the data management unit generates and configures software packages from the system options in the user interface, from the system information in the planning database

from the plans for the system structure which are produced in the planning logic unit, and

transfers the software packages to the installation tool and

the installation tool automatically checks the software packages taking account of rules, stipulations and dependencies among the system components.